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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WILSON, YOLANDA L

ART UNIT

PAPER NUMBER

2113

3

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/950,026

Applicant(s)

PHAM, MANH HUNG

Examiner

Yolanda Wilson

Art Unit

2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5,7-9,11-14,16-21,23-25,27-30,32 are rejected under 35 U.S.C. 102(e) as being anticipated by Roohparvar (US Publication Number 20020157048A1). As appears in claims 1 and 17, Roohparvar discloses detecting a memory error; analyzing said memory error, determining a memory module in which said error occurred and creating a log; and storing said log in said non-volatile memory section of said memory module on page 4, paragraphs 0038,0039,0041-0043.
3. As appears in claims 2 and 18, Roohparvar discloses wherein said memory error is detected during a diagnostic test on page 4, paragraph 0038, "The memory can be coupled an external processor 200 for operation or testing." and on page 4, paragraphs 0039,0041,0042.
4. As appears in claims 3 and 19, Roohparvar discloses wherein said memory error is detected during normal operation on page 4, paragraph 0038, "The memory can be

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coupled an external processor 200 for operation or testing.” and on page 4, paragraphs 0039,0041,0042.

5. As appears in claims 4 and 20, Roohparvar discloses wherein said log comprises information about the error type on page 4, paragraph 0043.

6. As appears in claims 5 and 21, Roohparvar discloses wherein said log comprises information about the location of the memory module on page 2, paragraphs 0013,0014.

7. As appears in claims 7 and 23, Roohparvar discloses wherein said log comprises information about the system identification on page 2, paragraphs 0013,0014.

8. As appears in claims 8 and 24, Roohparvar discloses wherein said log is stored in a cyclical manner on page 3, paragraph 0031.

9. As appears in claims 9 and 25, Roohparvar discloses a central processing unit; a memory system coupled with said central processing unit comprising a plurality of memory module slots for receiving of memory modules, said memory module comprising a random access memory section and a non-volatile memory section; means for detecting an error in said memory system; means for generating a log about said error; and means for storing said log in said non-volatile memory section of a memory module on page 2, paragraph 0018 and on page 4, paragraph 0037.

10. As appears in claims 11 and 27, Roohparvar discloses wherein said non-volatile memory is divided in a plurality of sub sections each sub section storing one log on page 2, paragraphs 0013,0014.

11. As appears in claims 12 and 28, Roohparvar discloses wherein said sub sections are written in a cyclical manner on page 3, paragraph 0031.

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12. As appears in claims 13 and 29, Roohparvar discloses wherein said log comprises information about the error type on page 4, paragraph 0043.

13. As appears in claims 14 and 30, Roohparvar discloses wherein said log comprises information about the location of the memory module on page 2, paragraphs 0013,0014.

14. As appears in claims 16 and 32, Roohparvar discloses wherein said log comprises information about the system identification on page 2, paragraphs 0013,0014.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 6,15,22,31,10,26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roohparvar in view of Lenny et al. (USPN 6600614B2). As appears in claims 6,15,22,and 31, Roohparvar fails to explicitly state said log comprises information about the date and time when said error occurred.

Lenny et al. discloses in column 8, lines 49-54, "Further shown in Table 2 below is the organization of a sector that holds Critical Event Log information. Each sector of the Critical Event Log 121 can hold up to fifteen entries as shown by the rows 6-17. The

rows 1-5 store information pertaining to the starting number and the time stamp of the first entry of the fifteen entries."

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the log comprise information about the date and time when said error occurred. A person of ordinary skill in the art would have been motivated to have the log comprise information about the date and time when said error occurred because the date and time are used to determine whether or not a particular error has occurred before in order to determine a cause of failure. Lenny et al. discloses in column 7, lines 30-32, "A time stamp for each occurrence of event, for example, would be a great tool for understanding the past of the failed disc drive."

17. As appears in claims 10 and 26, Roohparvar fails to explicitly state wherein said means for detecting an error generate an exception within said central processing unit.

Lenny et al. discloses in column 6, lines 20-26, "The host computer polls the disc drive on a regular basis to check the status of the 'report status' command, and if the command signals imminent failure, the host computer sends an alarm to the end user or the system administrator. This allows scheduling of a downtime for backup of data and replacement of the disc drive."


Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the means for detecting an error generate an exception within said central processing unit. A person of ordinary skill in the art would have been motivated to have the means for detecting an error generate an exception

within said central processing unit because the exception can be used to indicate to a user problems in a memory device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yolanda Wilson whose telephone number is (703) 305-3298. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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